





Particles generated by the technological process might be the size of $0,1\mu\text{m}$ up to $500\mu\text{m}$. These particles cannot be freely exhausted into the air. There are many methods of how to separate particles from waste gases. The most common principle uses a sprinkled liquid (in most scenarios water) for separation of the particles from a gas stream.

Efficiency of this tool is very high for its wide range of particle sizes, which can be dispersed in the gas phase.

Features and Benefits

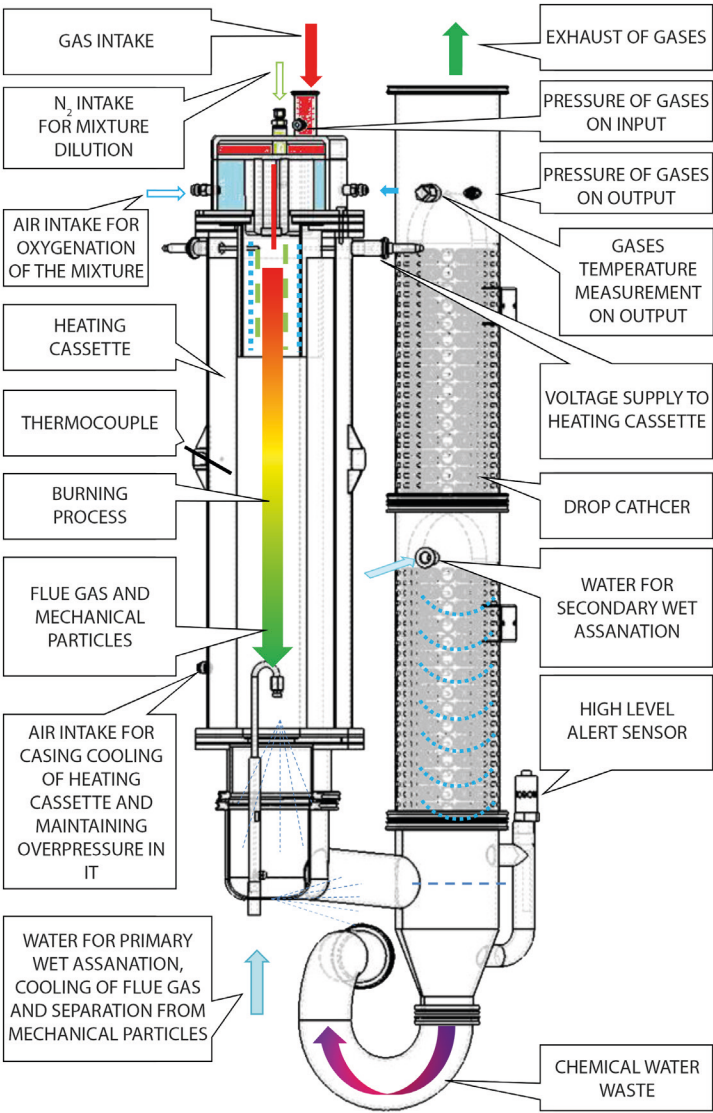
- | Reactor Temperature 800°C
- | High Efficiency for Particles $<1\mu\text{m}$ up to as big particles as which can be dispersed in gas phase
- | Controlled enrichment of the Gas Mixture for maximum efficiency of the combustion Process
- | Controlled heating of the Combustion Chamber to the Reaction Temperature for maximum efficiency of the Combustion Process

Ultra High Purity

Technical Data

Gases input to be purified	DN40 KF (1 to 4 inputs)	80 slpm / 1 input
Purified gases output at the exhaust	$\varnothing 100\text{ mm}$	$-150 \div -400\text{ Pa}$ 10m ³ /h / 1 input
N ₂ for dilution of the purified gases and for combustion reactor purge	OD $\frac{1}{4}"$	5÷6 bar min. 50 slpm
Input of compressed air in oxidation section	OD $\frac{3}{8}"$	3÷7 bar 50÷100 slpm
Water input for primary and secondary damp cleaning	G $\frac{1}{2}"$	3÷5 bar 15÷25 slpm 15÷25°C

Burning Process



Burn Scrubber

Gases input to be purified	DN40 KF (1 to 4 inputs)	80 slpm / 1 input
Purified gases output at the exhaust	ø100 mm	-150 ÷ -400 Pa 10m3/h / 1 input
N ₂ for dilution of the purified gases and for combustion reactor purge	OD 1/4"	5÷6 bar min. 50 slpm
Input of compressed air in oxidation section	OD 3/8"	3÷7 bar 50÷100 slpm



The wet scrubbing method is of unique importance because it simultaneously removes both solid particles and gaseous components that are soluble in water from the polluted gas stream.

Furthermore, wet scrubbers can be used as reactors where chemical oxidation or reduction alters the chemical or physical properties of the contaminants. The waste water from the scrubbers can be treated with acid or alkali so that only neutral water exits the waste water.

No other such simple device has the ability to provide a similar reaction, absorption and separation of particles from the gas stream. When compared to other separation methods, wet sprinkling is not only unique in its versatility, but the operation is also much cheaper and safer.

Features and Benefits

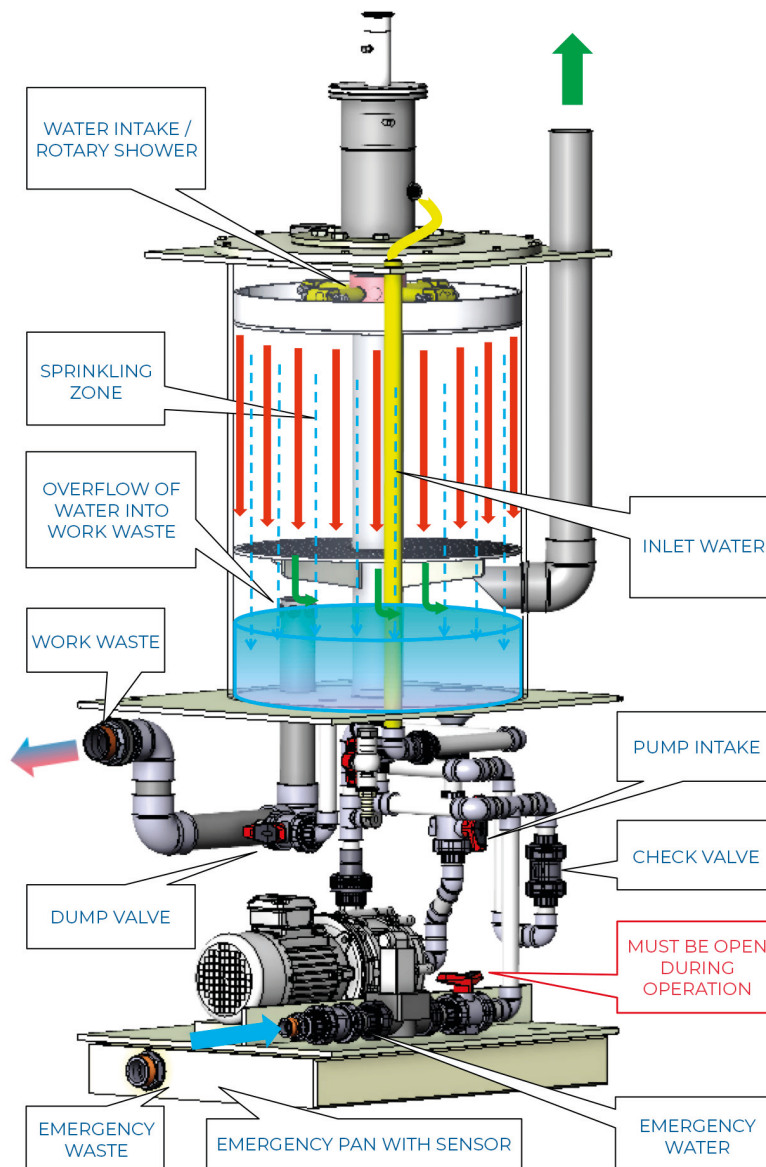
- | Sprinkler fluid, in most cases the water
- | High Efficiency for Particles $<1\mu\text{m}$ up to as big particles as which can be dispersed in gas phase
- | The gases entering the reactor chamber are entrained by a strong stream of water - a shower
- | Minimal maintenance requirements

Ultra High Purity

Technical Data

Weight	ca. 180kg	Without water
Electrical connection	400V, 50Hz	Adapted to power grid of destination country
Fuse	16A	
Power consumption	2,2kW	
N ₂	Pressure	2,5÷3 bar
	Typical flow	15 l/min
Working water	Max. pressure	2,5 bar
	Temp	7÷18°C
	Flow	5÷15 l/min

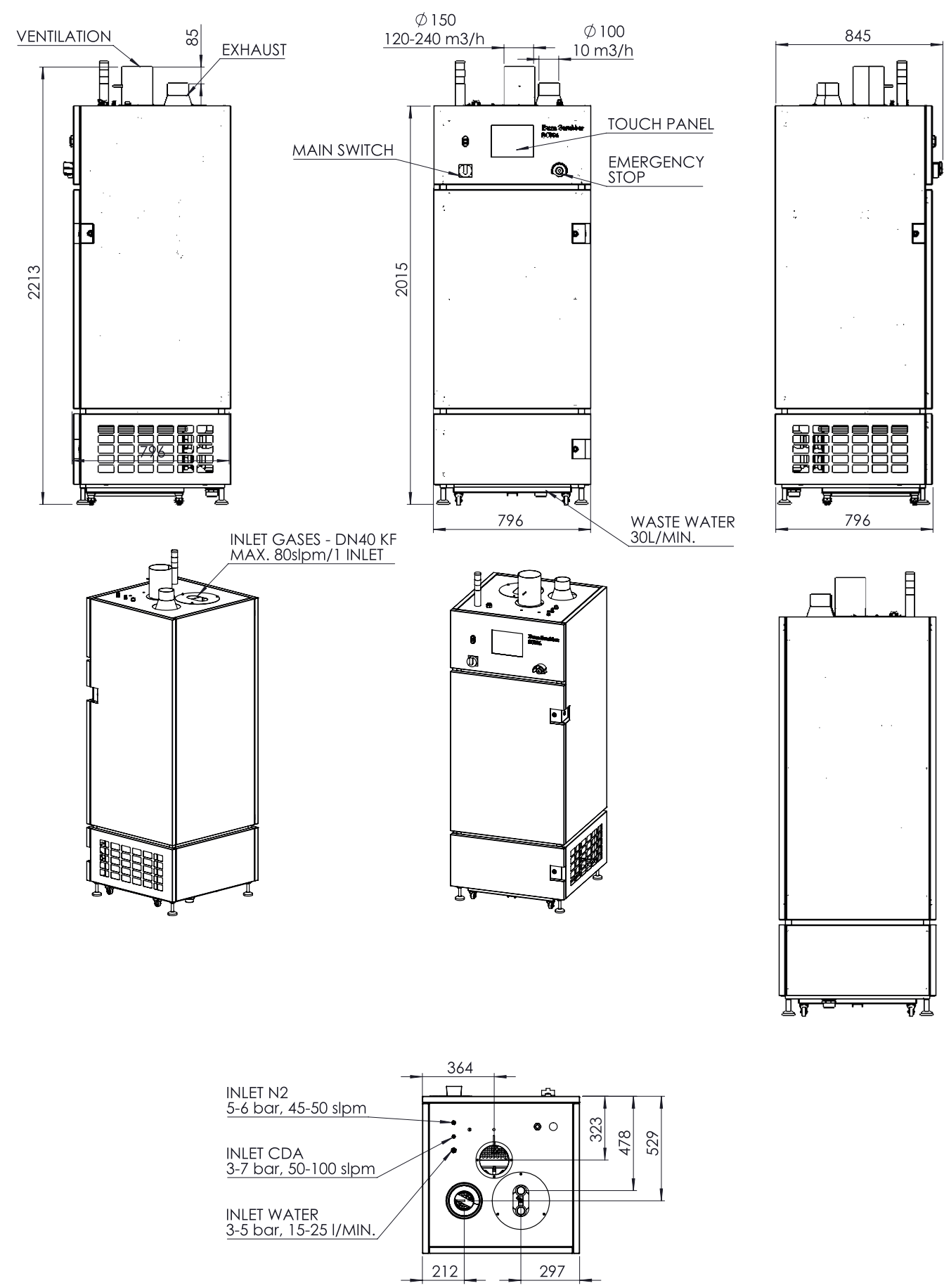
Wet scrubbing



Water Scrubber

Waste water	Min. flow	30 l/min
Inlet gas pressure	500 Pa	~2 inch of water
Outlet gas pressure	-500 Pa	

Drawings Burn Scrubber



Drawings Water Scrubber

